

Message Text

LIMITED OFFICIAL USE

PAGE 01 TOKYO 04477 200953Z
ACTION OES-07

INFO OCT-01 EA-10 ISO-00 COME-00 SP-02 USIA-06 AID-05
EB-08 NSC-05 TRSE-00 SS-15 STR-07 OMB-01 CEA-01
CIAE-00 FRB-03 INR-10 NSAE-00 XMB-02 OPIC-03
LAB-04 SIL-01 PA-01 L-03 /095 W
-----059634 201139Z /10

R 200904Z MAR 78
FM AMEMBASSY TOKYO
TO SECSTATE WASHDC 6308

LIMITED OFFICIAL USE TOKYO 04477

FOR OES/APT/SA; INR/OIL

DEPT. PASS TO DEPT. OF COMMERCE

E.O. 11652: N/A
TAGS: EQUIP, TECH, JA
SUBJECT: ITT'S ASSESSMENT OF MAJOR ADVANCES IN JAPANESE
ELECTRONICS INDUSTRY

1. ITT TECHNICAL NEWSLETTER FOR JAN.-FEB. 1978, PUBLISHED
IN TOKYO, GIVES BRIEF EVALUATION OF MAJOR R&D ACCOMPLISH-
MENTS OF JAPANESE ELECTRONICS FIRMS IN 1977 AND ITS
PROGNOSIS OF ACCOMPLISHMENTS BY THESE FIRMS IN 1978. FOR
CONVENIENCE, INFORMATION IS EXTRACTED AND REPRODUCED
BELOW.

2. NIPPON ELECTRIC COMPANY
1977 ACHIEVEMENTS: 64 KBIT MOS RAM BASIC DESIGN FOR VLSI;
SEMI-CONDUCTOR LASER WITH PROSPECT FOR 1 MILLION
HOUR LIFE; SIMPLE VOICE RECOGNITION EQUIPMENT WITH 100
WORD CAPACITY.
1978 OBJECTIVES: BASIC TECHNOLOGIES FOR COST REDUCTION;
HARDWARE AND SOFTWARE MEETING MARKET NEEDS.
LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 02 TOKYO 04477 200953Z

3. FUJITSU
1977: OPTICAL COMMUNICATIONS; EXTRAFINE LITHOGRAPHY FOR
IC'S; MEANDERING PLASMA DISPLAY PANEL; 3 MICROMETER
MAGNETIC MEMORY BUBBLES; GALLIUM ARSENIDE FIELD EFFECT
TRANSISTOR; OPTICAL CHARACTER RECOGNITION.
1978: TECHNOLOGIES FOR IMPROVED PRODUCT QUALITY AND REDUCED

COST; DIGITAL SWITCHING; OPTICAL COMMUNICATIONS,
MAGNETIC BUBBLE MEMORY; MAGNETIC DISCS, HIGH SPEED
NON-IMPACT PRINTER.

4. HITACHI

1977: HIGH-VOLTAGE, HIGH-POWER MOS FIELD EFFECT TRANSISTOR;
SEMI-CONDUCTOR LASER PICK UP FOR PCM RECORDING DISC;
ELECTRON BEAM PATTERNING AND OTHER EXTRA FINE LITHOGRAPHIC
PROCESSING OF IC'S.

1978: HIGHER SPEED BUBBLE MEMORIES; OPTICAL SENSORS AS
AMORPHOUS THIN FILM DEVICES; ACHIEVING R&D LEVEL EQUAL
TO 5 PER CENT OF SALES; REDUCING GOVERNMENT R&D
SUBSIDIES TO LESS THAN 10 PER CENT OF TOTAL HITACHI
R&D BUDGET.

5. TOSHIBA

1977: CHEMICAL DRY ETCHING OF IC'S; LARGE CAPACITY GATE-
TURN-OFF THYRISTOR; APPLICATIONS OF LITHIUM TANTALATE
SURFACE ACOUSTIC WAVE ELEMENTS.

1978: FACSIMILE MACHINE FOR HOME USE; USE OF MICRO-
PROCESSORS IN HOME APPLIANCES.

6. NIPPON TELEPHONE AND TELEGRAPH

1977: SINGLE CHIP 64 KBIT MOS RAM; E-SQUARED MOS; FIVE
INCH SILICON WAFER; OPTICAL FIBER WITH 0.5 DB/KM
LINE LOSS; SEMICONDUCTOR LASER WITH LIFETIME OF OVER
LIMITED OFFICIAL USE

LIMITED OFFICIAL USE

PAGE 03 TOKYO 04477 200953Z

1 MILLION HOURS; METAL-ENCASED HARD REELS; MAGNETIC
BUBBLE MEMORY; HIGH SPEED CPU FOR ELECTRONIC
SWITCHING SYSTEM; PACKET SWITCHING.
1978: DATA NETWORK; DIGITAL EXCHANGES; OPTICAL FIBERS.

7. SHARP ELECTRONICS

1977: ELECTROLUMINESCENCE DISPLAY; HIGH VOLTAGE MOS IC
TO DRIVE ELECTROLUMINESCENCE DEVICE; BAR CODE READER
USING SEMI-CONDUCTOR LASER; COMPUTER AIDED DESIGN OF
CIRCUIT BOARDS BY MINICOMPUTER.

1978: SOLAR ENERGY; VISIBLE BEAM SEMI-CONDUCTOR LASER.

8. MITSUBISHI ELECTRIC

1977: (NONE)

1978: 16 KBIT RAM WITH 50-70 NS ACCESS TIME; IMPROVED
YIELD OF 64 KBIT RAM; SINGLE-MODE SEMI-CONDUCTOR LASER
WITH 100,000 HOUR LIFE. MANSFIELD

LIMITED OFFICIAL USE

NNN

Message Attributes

Automatic Decaptioning: X
Capture Date: 01 jan 1994
Channel Indicators: n/a
Current Classification: UNCLASSIFIED
Concepts: INDUSTRIAL DEVELOPMENT, ELECTRONICS INDUSTRY
Control Number: n/a
Copy: SINGLE
Draft Date: 20 mar 1978
Decaption Date: 01 jan 1960
Decaption Note:
Disposition Action: RELEASED
Disposition Approved on Date:
Disposition Case Number: n/a
Disposition Comment: 25 YEAR REVIEW
Disposition Date: 20 Mar 2014
Disposition Event:
Disposition History: n/a
Disposition Reason:
Disposition Remarks:
Document Number: 1978TOKYO04477
Document Source: CORE
Document Unique ID: 00
Drafter: n/a
Enclosure: n/a
Executive Order: N/A
Errors: N/A
Expiration:
Film Number: D780122-0449
Format: TEL
From: TOKYO
Handling Restrictions: n/a
Image Path:
ISecure: 1
Legacy Key: link1978/newtext/t19780345/aaaabmfq.tel
Line Count: 111
Litigation Code IDs:
Litigation Codes:
Litigation History:
Locator: TEXT ON-LINE, ON MICROFILM
Message ID: 47e760c3-c288-dd11-92da-001cc4696bcc
Office: ACTION OES
Original Classification: LIMITED OFFICIAL USE
Original Handling Restrictions: n/a
Original Previous Classification: n/a
Original Previous Handling Restrictions: n/a
Page Count: 3
Previous Channel Indicators: n/a
Previous Classification: LIMITED OFFICIAL USE
Previous Handling Restrictions: n/a
Reference: n/a
Retention: 0
Review Action: RELEASED, APPROVED
Review Content Flags:
Review Date: 05 may 2005
Review Event:
Review Exemptions: n/a
Review Media Identifier:
Review Release Date: N/A
Review Release Event: n/a
Review Transfer Date:
Review Withdrawn Fields: n/a
SAS ID: 3263327
Secure: OPEN
Status: NATIVE
Subject: ITT'S ASSESSMENT OF MAJOR ADVANCES IN JAPANESE ELECTRONICS INDUSTRY
TAGS: EQUIP, TECH, JA
To: STATE
Type: TE
vdkgvwkey: odbc://SAS/SAS.dbo.SAS_Docs/47e760c3-c288-dd11-92da-001cc4696bcc
Review Markings:
Sheryl P. Walter
Declassified/Released
US Department of State
EO Systematic Review
20 Mar 2014
Markings: Sheryl P. Walter Declassified/Released US Department of State EO Systematic Review 20 Mar 2014